Claim Listing:

1.   (Previously Presented) A user equipment (UE) including a transmitter for transmitting a data field of symbols, the transmitter comprising:

a first and second antenna for transmitting said data field of symbols, wherein said data field includes a first data field;

an encoder for encoding said data field producing a second data field having complex conjugates of the symbols of said data field; and

a first and second spreading device for spreading said first and second data fields, wherein said first spreading device spreads said first data field using a first channelization code and said second spreading device spreads said second data field using a second channelization code, each channelization code being uniquely associated with one of said first and second antennas.

2.   (Original) The UE of claim 1 wherein said transmitter further comprises a first and second scrambling device for scrambling said first and second spread data fields by a single scrambling code associated with said transmitter.

3.   (Original) The UE of claim 2 wherein the symbols of said first data field of symbols are grouped into a first and second sub-data field.

4.   (Original) The UE of claim 3, wherein the symbols of said second data field of symbols are grouped into a third and fourth sub-data field, said third sub-data field being the negative complex conjugate of said second sub-data field and said fourth sub-data field being the complex conjugate of said first sub-data field.

5.   (Previously Presented) A user equipment (UE) including a transmitter comprising a transmitter including:

a first and second means for transmitting a data field of symbols including a first data field;

a means for encoding said data field producing a second data field having complex conjugates of the symbols of said first data field; and

a first and second spreading means for spreading said first and second data fields, wherein said first spreading means spreads said first data field using a first channelization code and said second spreading means spreads said second data field using a second channelization code, each channelization code being uniquely associated with one of said first and second transmitting means.

6.   (Original) The UE of claim 5 wherein said transmitter further comprises a means for scrambling said first and second spread data fields by a scrambling code associated with said transmitting means.

7.   (Original) The UE of claim 6 wherein the symbols of said first data field of symbols are grouped into a first and second sub-data field.

8.   (Original) The UE of claim 7, wherein the symbols of said second data field of symbols are grouped into a third and fourth sub-data field, wherein said third sub-data field is the negative complex conjugate of said second sub-data field and said fourth sub-data field is the complex conjugate of said first sub-data field.

9.   (Original) A user equipment (UE) including a transmitter for transmitting a data field of symbols, the transmitter comprising:

a first and second antenna for transmitting said data field of symbols; and

a first and second spreading device for spreading said data field, wherein said first spreading device spreads said data field using a first channelization code, producing a first spread data field, and said second spreading device spreads said data field using a second channelization code, producing a second spread data field,

each channelization code being uniquely associated with one of said first and second antennas.

10.   (Original) The UE of claim 9 further comprising a first and second scrambling device for scrambling said first and second spread data fields by a single scrambling code associated with said transmitter.

11.   (Original) A user equipment (UE) including a transmitter comprising:

a first and second means for transmitting a data field of symbols; and

a first and second spreading means for spreading said data field, wherein said first spreading means spreads said data field using a first channelization code producing a first spread data field and said second spreading means spreads said second data field using a second channelization code producing a second spread data field, each channelization code being uniquely associated with one of said first and second transmitting means.

12.   (Original) The UE of claim 11 further comprising a means for scrambling said first and second spread data fields by a scrambling code associated with said transmitting means.